

10/523301

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

International application No. International application No. International application No. International filling date (day/month/year) (Earliest) Priority Date (day/month/year) Applicant CIBA SPECIALTY CHEMICALS WATER TREATMENTS LIMITED This International Search Report has been prepared by this international Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the international Bureau. This International Search Report consists of a total of	Applicant's or agent's file reference	(Form PCT/ISA/2)	f Transmittal of International Search Report 20) as well as, where applicable, item 5 below.
PCT/EP 03/ 08427 Applicant CIBA SPECIALTY CHEMICALS WATER TREATMENTS LIMITED This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau. This International Search Report consists of a total of		ACTION	
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It is also accompanied by a copy of each prior and document cited in this report. 1. Basis of the report a. With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item. the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)). b. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international search was carried out on the basis of the sequence listing: contained in the international application in written form. filled together with the international application in computer readable form. furnished subsequently to this Authority in computer readable form. the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished. the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished. Certain claims were found unsearchable (See Box I). Unity of invention is lacking (see Box II). 4. With regard to the title, The text is approved as submitted by the applicant. the text has been established by this Authority to read as follows: 5. With regard to the abstract, The figure of the drawings to be published with the abstract is Figure No. as suggested by the applicant. because the applicant failed to suggest a figure.			ority and is transmitted to the applicant
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A. CI *3SIFICATION OF SUBJECT MATTER
IPC C12P7/40 C12P13/04

C12P7/40 C12P7/24 C12P13/04 C12P7/28 C12P7/16 C12P7/06 C12P7/18

C12P7/20

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) $IPC \ 7 \ C12P$

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data, BIOSIS, MEDLINE, EMBASE

Category °	Citation of document, with indication, where appropriate, of the re-levant passages	Relevant to claim No.
X	PATENT ABSTRACTS OF JAPAN vol. 1997, no. 07, 31 July 1997 (1997-07-31) & JP 09 059891 A (HYMO CORP), 4 March 1997 (1997-03-04) abstract	1-19
x	PATENT ABSTRACTS OF JAPAN vol. 002, no. 060 (M-018), 28 April 1978 (1978-04-28) & JP 53 023145 A (KURITA WATER IND LTD), 3 March 1978 (1978-03-03) abstract	1-19
X	WO 02 16495 A (BERGGREN NILS ;CIBA SPEC CHEM WATER TREAT LTD (GB); NORMAN PETER I) 28 February 2002 (2002-02-28) the whole document	1-19

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° Special categories of cited documents :	*T* later document published after the international filing date
 A* document defining the general state of the art which is not considered to be of particular relevance 	or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
E earlier document but published on or after the international filing date	*X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to
"L" document which may throw doubts on priority claim(s) or	involve an inventive step when the document is taken alone
which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the
"O" document referring to an oral disclosure, use, exhibition or other means	document is combined with one or more other such docu- ments, such combination being obvious to a person skilled
P document published prior to the international filing date but	in the art.
later than the priority date claimed	*&* document member of the same patent family
Date of the actual completion of the international search	Date of mailing of the international search report

14/10/2003

29 September 2003

nailing address of the ISA Authorized officer

Name and mailing address of the ISA

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Further documents are listed in the $\,$ continuation of box C.

Pinheiro Vieira, E

Patent family members are listed in annex.

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International Appoint No PCT/EP 03/08427

C.(Cr - 'nu	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	
	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Х	WO 01 12778 A (WEIR STEVEN ; HUGHES JONATHAN (GB); MORAN PAUL (GB); CIBA SPEC CHEM) 22 February 2001 (2001-02-22) the whole document	1-19
Y	US 6 031 037 A (GHAFOOR MARK SIRFARAZ ET AL) 29 February 2000 (2000-02-29) the whole document	1-19
Y	US 5 552 316 A (SAVAGE CHRISTOPHER M) 3 September 1996 (1996-09-03) the whole document	1-19
Y	US 5 846 433 A (FIELD JOHN RODNEY ET AL) 8 December 1998 (1998-12-08) the whole document	1-19
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INTERNAT AL SEARCH REPORT

International A on No PCT/EP 03/08427

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Patent document sited in search report		Publication date		Patent family member(s)		Publication date
JP 09059891	Α	04-03-1997	JP	3361215	B2	07-01-200
JP 53023145	Α	03-03-1978	JP	1035647	С	26-02-198
		22 23,0	ĴΡ	53041911		07-11-197
WO 0216495	Α	28-02-2002	AU	8980301	 А	04-03-200
			BR	0113474		15-07-200
			CA	2418483		28-02-200
			MO	0216495		28-02-200
	<u>:</u>		EP 	1311614		21-05-200
WO 0112778	Α	22-02-2001	AU	6990600		13-03-200
			BR	0013259		16-04-200
			CA CN	2380652 1369004		22-02-200; 11-09-200;
			CZ	20020536		15-05-200
			WO	0112778		22-02-200
			EP	1210406		05-06-2002
			HU	0202434		28-11-2002
			JP	2003507032		25-02-2003
			NO	20020729 	A 	12-04-2002
US 6031037	Α	29-02-2000	AU	730750		15-03-200
			AU AU	5672298 730638		07-08-1998
			AU	5672498		08-03-2001 07-08-1998
•			BR	9807489		21-03-2000
			BR	9807496		21-03-2000
			EP	0953013		03-11-1999
			EP	0953014		03-11-1999
			WO WO	9831748 9831749		23-07-1998 23-07-1998
			JP	2001508826		03-07-2001
			JP	2001508827		03-07-2001
			NO	993371		08-07-1999
			NO	993408		09-07-1999
			NZ NZ	336615 336616		23-02-2001 23-02-2001
•			RU	2203914		10-05-2003
		•	TW	498081		11-08-2002
			TW	446713	В	21-07-2001
			US	6001920		14-12-1999
			ZA ZA	9800445 9800446		20-01-1999
				90UU440 	n 	20-01-1999
US 5552316	Α	03-09-1996	NONE			
US 5846433	Α	08-12-1998	AT	172700	 T	15-11-1998
			AU	2677795	Α	04-01-1996
			DE	69505665		03-12-1998
			DE	69505665		25-03-1999
			DK Ep	764140 0764140		12-07-1999 26-03-1997
			ES ES	2124555		01-02-1999
			WO	9533697		14-12-1995
			WU	2243021		